

THIS IS NOT A SOLICITATION



**Montgomery County, Maryland
Department of General Services
Division of Fleet Management Services
REQUEST FOR INFORMATION**

**ZERO EMISSION TECHNOLOGIES FOR PURCHASE, LEASE AND SERVICE OF TRANSIT BUSES AND OTHER
SUPPORTING INFRASTRUCTURE APPLICATIONS**

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1. Intent

The purpose of the Request for Information (RFI) is to obtain information and determine the market availability of companies that have the experience, capability, equipment and funding capacity necessary to provide Zero Emission Transit Buses and Charging Infrastructure as a purchase, service, lease or other to Montgomery County. Potential Contractor(s) would be required to work with The Department of General Services (DGS) in partnership with the Department of Transportation (MCDOT) in pursuing alternatives to conventional methods of procuring Battery Electric Buses (BEBs), Fuel Cell Electric Buses (FCEBs) and/or other Zero Emission technologies that may exist at the time of purchase and implementation. This County initiative will include providing vehicles, charging/fueling infrastructure, energy storage, operational management and maintenance of the charging/fueling infrastructure to be purchased, and/or leased by Montgomery County Government, DGS. The County is interested in a full-service solution, as well as an understanding of components of the whole, so we encourage Contractors to provide information on these and bundled solutions as well.

2. Question Submission Protocol

Questions about this RFI should be submitted by email to Calvin.jones@montgomerycountymd.gov by 12/10/2020.

3. Due Date

Responses to this RFI are due on 12/18/2020 at 5:00 pm.

4. Submission Requirements

Responses will be received via electronic transmission only. **Electronic submissions should be emailed to Calvin Jones at Calvin.jones@montgomerycountymd.gov. The email must reference the RFI name in the subject line: ZERO EMISSION TECHNOLOGIES FOR PURCHASE, LEASE AND SERVICE OF TRANSIT BUSES AND OTHER SUPPORTING INFRASTRUCTURE APPLICATIONS.**

5. RFI Usage

This RFI will be used to understand the state of the industry, market interest and proven creative solutions that don't require major capital expenditure by the County. The information received from this RFI and other research may be used to issue a Request for Proposal (RFP) or any other option the County has, including other source selection methods to advance this concept. However, this RFI does not represent a commitment to that end.

6. Agency Overview

The Montgomery County Department of Transportation (MCDOT), Division of Transit Services maintains the transit infrastructure supportive of the Ride On Bus System, including planning, scheduling and managing the County's Ride On Bus System consisting of 377± County owned and operated buses. The Ride On Bus System provides approximately 40 million trips and travels over 13,000,000 miles annually.

The Ride On Bus System services are coordinated with the services of other public transportation providers, including the Washington Metropolitan Area Transit Authority's Metrobus and Metrorail and the Maryland Mass Transit Administration's MARC commuter rail and MTA commuter bus systems. Metrobus in Montgomery County provides 22 million transit trips each year in addition to Metrorail providing approximately 40 million trips per year.

For more information on the County's transportation infrastructure, see <https://www.montgomerycountymd.gov/DOT-Transit/routesandschedules/rideonroutes.html> for Ride On Routes and Schedules, <https://www.montgomerycountymd.gov/dot-dir/TransPolicy.html> for Transportation Policy.

The Montgomery County Department of General Services (DGS), Division of Fleet Management Services is the Contract Administrator for capital procurement contracts as well as all maintenance contracts for the Ride On Bus Fleet. The Division of Fleet Management Services specifies equipment, operates the fuel sites, provides maintenance, and disposes of transit buses that have reached the end of useful life, in support of the transportation and service needs of MCDOT. In addition, DGS oversees the installation and operation of electric microgrids or other alternative energy source plants at County facilities, most commonly through Power Purchase Agreements (PPA).

Ride On currently operates from 3 transit bus depots

- **Silver Spring Depot**- 8710 Brookville Rd. Silver Spring, MD 20910

Houses approximately (150) 30ft, 35ft and 40ft buses, a mix of electric, diesel, and diesel hybrid buses. Provides support to the southern portion of the County. This site currently has a microgrid in design phase to support up to 70 buses and is planned to be operational in 2021.

- **Gaithersburg Depot**- 16700 Crabbs Branch Way Derwood, MD 20855
Houses approximately (170) 40ft and 60ft buses, including CNG and diesel buses. Provides support to the northern portion of the County. This site has a CNG site capable of fueling up to 200 CNG buses nightly.
- **Kensington Depot**- 4901 Nicholson Ct Kensington, MD 20895
Houses approximately (70) 30ft diesel buses. Provides service across the County on routes requiring a shorter wheelbase bus.

Ride On operations consume approximately 3 million gallons of diesel fuel and 1.5 million gasoline gallon equivalents (GGE) of CNG annually.

7. Project Overview

Montgomery County, Maryland has developed emissions reduction goals of 80% by 2027, and a 100% reduction goal by 2034. In order to meet the goals established by Montgomery County Executive and Montgomery County Council, of the County is committed to converting its Ride On transit bus fleet from petroleum-based fuel sources to zero emission vehicles. The County has procured 4 electric buses and is in the process of purchasing another 10 electric buses in 2021. However, the County needs to expedite the implementation of a total transition to a zero-emission bus fleet to meet the County emissions goals.

The cost of infrastructure and the increased cost of battery electric buses (BEBs) and fuel cell electric buses (FCEBs) compared to diesel and CNG buses present funding challenges that require the County to look at additional funding strategies.

As a result of the funding challenges associated with this endeavor and based on our present understanding of what may be possible or likely, the County anticipates some scenarios that would include developing a long term agreement with a partner, or partners to fund, build and maintain infrastructure capable of fueling/charging BEBs or FCEBs, and also fund the purchase and/or lease of the buses. The County is looking for companies to provide information on solutions available in the market, including but not limited to paying for the infrastructure and use of the buses as a service on a monthly basis. However, the buses must be operated and maintained by County staff for any solution.

Based on the current number of transit buses in the Ride On bus fleet and the number of bus depots, this project is expected to potentially fund approximately 360 buses and at least 2 charging/fueling facilities. Due to length of transit buses and range limitations associated with electric buses this project may also entail the installation of in-route charging infrastructure and could include fuel cell technologies. This initiative may also include land acquisition, management of Rights of Ways (ROW) and maintenance costs for in-route charging stations.

8. Lifecycle

The lifecycle of the project is expected to be 24 years. The County uses Federal Transit Administration (FTA) grant funding as a part of its current funding strategy for the acquisition of transit buses. As a result, the transit bus fleet has a 12-year or 500,000-mile mandated lifecycle. It is expected that the County would transition its transit fleet over a 12-year period to avoid any potential penalties from FTA due to the early retirement and disposal of an asset.

9. **FTA Grant Funding**

Montgomery County Ride On is an FTA grant recipient. In order to limit the financial exposure to all parties Montgomery County requires the partner(s) to deliver services in compliance with FTA rules and regulations.

10. **Vehicle Energy Storage**

The scope of the project anticipates the known power storage capacity of most electric buses of 600 kWh. Typical drive ranges are 150-175 miles depending on weather, drivers' habits, terrain and load. The longest Ride On are in excess of 300 miles, which will require either additional buses running shorter routes, in-route recharging, or some other solution.